ROY COOPER Governor DIONNE DELLI-GATTI Secretary MICHAEL ABRACZINSKAS Director



DRAFT

Mr. Allen Finchum Plant Manager Molded Fiber Glass Company/North Carolina 213 Reep Drive Morganton, North Carolina 28655

SUBJECT: Air Quality Permit No. 06218T21

Facility ID: 1200094

Molded Fiber Glass Company/North Carolina

Morganton, North Carolina

Burke County Fee Class: Title V PSD Status: Minor

Dear Mr. Finchum:

In accordance with your completed Air Quality Permit Applications for a Significant Modification (02Q .0501(b)(1)) of your Title V permit received December 8, 2020, we are forwarding herewith Air Quality Permit No. 06218T21 to Molded Fiber Glass Company/North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.



Mr. Allen Finchum DRAFT Page 2

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Burke County has not triggered increment tracking under PSD for any pollutants, so no tracking is required.

This Air Quality Permit shall be effective from DRAFT until September 30, 2023, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Jenny Sheppard at (919) 707-8727 or jenny.sheppard@ncdenr.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section Division of Air Quality, NCDEQ

Enclosure

Michael Sparks, EPA Region 4 (permit and review)
 Asheville Regional Office
 Central Files

ATTACHMENT to Permit No. 06218T21

Insignificant Activities per 15A NCAC 02Q .0503(8)

Source ID Nos.	Emission Source Description	
I-Preformer	Natural gas-fired performer	
I-Touchup booth MACT PPPP	Touchup booth with direct fired curing oven (1.0 million Btu per hour)	
I-Curing oven MACT PPPP	Natural gas-fired curing oven (1.0 million Btu per hour)	
I-Tank-01 MACT WWWW	One resin storage tank (6,000 gallon capacity)*	
I-Tank-02 MACT WWWW	One resin storage tank (6,000 gallon capacity)*	
I-Tank-03 MACT WWWW	One resin storage tank (5,000 gallon capacity)*	
I-Tank-04 MACT WWWW	One resin storage tank (5,000 gallon capacity)*	

- 1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
- 2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
- 3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.

Summary of Changes to Permit

The following changes were made to the Molded Fiberglass Companies North Carolina – Morganton, Air Permit No. 06218T20

Page No.	Section	Description of Changes
	Cover Letter	Used current shell language, updated permit numbers, dates, etc.
	Insignificant activities list	
All	All	Used current shell language, updated permit numbers, dates, etc.
4	Equipment List	Corrected the boiler rating for boiler ESB3 from 8.37 to 10.2 and added rule reference for NSPS Dc
6	2.1 A	Updated 02D .0521 monitoring language
	2.1 C	Updated 02D .0521 monitoring language, corrected formatting for MACT PPPP condition
	2.1 D	Updated 02D .0515 (added control IDs), updated 02D .0521 monitoring language
6	2.1 E	Corrected the summary of limits table for boiler ESB3 for 02D .0503 from 0.56 pounds per million Btu to .054. Added reference to NSPS Dc, correct rule (02D) reference for MACT DDDDD. Added NSPS Dc condition for ESB3. Corrected and updated MACT DDDDD condition for 5 to 10 million Btu per hour and greater than 10 million Btu per hour w/oxygen trim for Natural gas boilersCorrected 02D .0503 limit
27-31	2.1 A	Corrected to formatting for MACT WWWW
35-44	3 General Conditions	Updated general conditions with latest version (5.5,)



State of North Carolina Department of Environmental Quality Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
06218T21	06218T20	DRAFT	September 30, 2023

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Molded Fiber Glass Company/North Carolina

Facility ID: 1200094

Facility Site Location: 213 Reep Drive

City, County, State, Zip: Morganton, Burke County, North Carolina 28655

Mailing Address: 213 Reep Drive

City, State, Zip: Morganton, North Carolina 28655

Application Numbers: 1200094.20B Complete Application Date: December 8, 2020

Primary SIC Code: 3089

Division of Air Quality, Asheville Regional Office Regional Office Address: 2090 U.S. Highway 70

Swannanoa, North Carolina 28778

Permit issued this the XXth day of MONTH, 2021

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section By Authority of the Environmental Management Commission

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ATTACHMENT List of Acronyms

${\bf SECTION\,1-PERMITTED\,EMISSION\,SOURCE(S)\,AND\,ASSOCIATED\,AIR}\\ {\bf POLLUTION\,CONTROL\,DEVICE(S)\,AND\,APPURTENANCES}$

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
		Open Molding and Gel Coat Applicatio	n Operations	s
5, 6, 27, 28, 32	ES1A MACT WWWW	fiberglass reinforced plastic molding operations (open molding utilizing nonatomizing guns)	NA	NA
5, 6, 27, 28, 32	ES4 MACT WWWW	one dry-filter type spray booth (Gel coat spray booth) installed on gel coat application operations	NA	NA
		Closed and Compression Molding O	perations	
7, 27, 29, 31	ES1B-01 MACT WWWW	fiberglass reinforced plastic molding operations (Press 1 – one closed molding press)	NA	NA
7, 27, 29, 31	ES1C-01 MACT WWWW	fiberglass reinforced plastic molding operations (Press 11 – one 2,850 ton compression molding press)	NA	NA
7, 27, 29, 31	ES1C-02 MACT WWWW	fiberglass reinforced plastic molding operations (Press 9 – one 1,000 ton compression molding press)	NA	NA
7, 27, 29, 31	ES1C-08 MACT WWWW	fiberglass reinforced plastic molding operations (Press 12 – one 2,875 ton compression molding press)	NA	NA
7, 27, 29, 31	ES1C-09 MACT WWWW	fiberglass reinforced plastic molding operations (Press 13 – one 3,000 ton compression molding press)	NA	NA
7, 27, 29, 31	ES1C-10 MACT WWWW	fiberglass reinforced plastic molding operations (Press 14 – one 1,000 ton compression molding press)	NA	NA
7, 27, 29, 31	ES1C-11 MACT WWWW	fiberglass reinforced plastic molding operations (Press 15 – one 2,000 ton compression molding press)	NA	NA
7, 27, 29, 31	ES1D MACT WWWW	closed molding mixing process	CD1	Fabric filter (47 square feet of filter area)
		Coating/Painting Operation	ns	
7, 8, 9,31	ES5-02 MACT PPPP	one dry-filter type spray booth	NA	NA
7, 9	ES5-04 MACT PPPP	one electrical, infrared curing oven	NA	NA
7, 9	ES9 MACT PPPP	adhesive application process	NA	NA
		Sanding/Trimming/Drilling/Routing	Operations	
20, 21	ES6	fiberglass reinforced plastic sanding and trimming operations	CD6	one cyclone (21 inches in diameter) installed in series with one cartridge filter (420 square feet of filter area)

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description	
20, 21	ES8	drilling, routing, trimming and sanding operations	CD8	one cyclone installed in series with one cartridge filter (1,792 square feet of filter area)	
	Boilers				
22, 23,	ESB2	one natural gas-fired boiler (5.1 million	NA	NA	
24, 25	MACT DDDDD	Btu per hour maximum heat input rate)			
22, 23,	ESB3	one natural gas-fired boiler (10.2 million	NA	NA	
24, 25	MACT DDDDD	Btu per hour maximum heat input rate)			
	NSPS Dc				

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Open molding and gel coat application operations consisting of:
Open molding utilizing non-atomizing guns (ID No. ES1A) and
One dry-filter type paint spray booth (gel coat spray booth) installed on gel coat application operations (ID No. ES4)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10P^{0.67}$	15A NCAC 02D .0515
	Where E = allowable emission rate in pounds per	
	hour	
	P = process weight in tons per hour	
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air	See Section 2.2 A.1	15A NCAC 02D .1111
Pollutants	(Reinforced Plastic Composites Production MACT)	40 CFR 60, Subpart
	-	WWWW
Volatile Organic	See Section 2.2 B.1	15A NCAC 02Q .0317
Compounds		PSD Avoidance

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (**ID Nos. ES1A and ES4**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \text{ x } P^{0.67}$$
 where $E =$ allowable emission rate in pounds per hour $P =$ process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02O .0508(f)]

- c. Particulate matter emissions from these sources (**ID Nos. ES1A and ES4**) shall be controlled by dry filters and adequate ductwork. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a weekly inspection of the spray booth's dry filters noting the condition; and
 - ii. an annual inspection of the associated ductwork noting structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and dry filters are not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of any maintenance performed on any filters; and

iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the dry filters or ductwork within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (**ID Nos. ES1A and ES4**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES1A and ES4) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.2 c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

B. Closed compression molding operations consisting of:

Press 1 – one closed molding press (ID No. ES1B-01),

Press 11 – one 2,850-ton compression molding press (ID No. ES1C-01),

Press 9 – one 1,000-ton compression molding press (ID No. ES1C-02),

Press 12 – one 2,875-ton compression molding press (ID No. ES1C-08),

Press 13 – one 3,000-ton compression molding press (ID No. ES1C-09),

Press 14 – one 1,000-ton compression molding press (ID No. ES1C-10) and

Press 15 - one 2,000-ton compression molding press (ID No. ES1C-11)

Closed molding mixing process (ID No. ES1D)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air	See Section 2.2 A.1	15A NCAC 02D .1111
Pollutants	(Reinforced Plastic Composites Production MACT)	40 CFR 63, Subpart
		WWWW
Volatile Organic	See Section 2.2 B.1	15A NCAC 02Q .0317
Compounds		PSD Avoidance

C. Coating/painting operations consisting of:

Adhesive application process (ID No. ES9),

One spray finishing line consisting of:

One dry-filter type spray booth (ID No. ES5-02) and One electrical, infrared curing oven (ID No. ES5-04)

The following table provides a summary of limits and standards for the emission source(s) described above:

	the following table provides a summary of minis and standards for the emission source(s) described above.		
Regulated	Limits/Standards	Applicable Regulation	
Pollutant			
Particulate Matter	ES5-02 only	15A NCAC 02D .0515	
	$E = 4.10P^{0.67}$		
	Where E = allowable emission rate in pounds per		
	hour		
	P = process weight in tons per hour		
Visible Emissions	ES5-02 only	15A NCAC 02D .0521	
	20 percent opacity		
Hazardous Air	Initial compliance date: April 19, 2007	15A NCAC 02D .1111	
Pollutants	(Surface Coating of Plastic Parts MACT)	40 CFR 63, Subpart PPPP	
Volatile Organic	See Section 2.2 B.1	15A NCAC 02Q .0317	
Compounds		PSD Avoidance	

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source (**ID No. ES5-02**) shall not exceed an allowable emission rate as calculated by the following equation:

 $E = 4.10 \text{ x } P^{0.67}$ Where E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from this source (**ID No. ES5-02**) shall be controlled by dry filters and adequate ductwork. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a weekly inspection of the spray booths' dry filters noting the condition; and
 - ii. an annual inspection of the associated ductwork noting structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and dry filters are not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of any maintenance performed on any filters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the dry filters or ductwork within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 C.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this source (**ID No. ES5-02**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source (**ID No. ES5-02**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) is below the limit given in Section 2.1 C.2.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

- i. the date and time of each recorded action;
- ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
- iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 C.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .1111: Maximum Achievable Control Technology (MACT) – Surface Coating of Plastic Parts and Products (40 CFR Part 63, Subpart PPPP)

a. For the surface coating operations (**ID Nos. ES5-02, ES5-04 and ES9**), the Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart PPPP, "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products", by April 19, 2007 or as amended by the rule for the applicable sources as detailed in the equipment table.

Emission Limits [40 CFR 63.4490]

b. For each general use coating affected source, the Permittee shall limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

Compliance Options [40 CFR 63.4491]

- c. The Permittee shall include all coatings, thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Section 2.1 C.3.b above. To make this determination, the Permittee shall use at least one of the following two compliance options. The Permittee may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. The Permittee may use different compliance options for different coating operations, or at different times on the same coating operation. The Permittee may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, the Permittee may not use different compliance options at the same time on the same coating operation. If the Permittee switches between compliance options for any coating operation or group of coating operations, he shall document this switch as required by Section 2.1 C.3.g.iii below, and shall report it in the next semiannual compliance report required in Section 2.1 C.3.h below.
 - i. <u>Compliant material option</u>. Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in Section 2.1 C.3.b above, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. The Permittee shall meet all of the following requirements to demonstrate compliance with the applicable emission limit using this option:
 - (A) The Permittee shall complete the initial compliance demonstration for the initial compliance period ending **April 30, 2008** or as amended by the rule, according to the requirements in Section 2.1 C.3.c.i.(B) below. The demonstration shall include the calculations and supporting documentation showing that during the initial compliance period, the Permittee used no coating with an organic HAP content that exceeded the applicable emission limit in Section 2.1 C.3.b above, and that he used no thinners and/or other additives, or cleaning materials that contained organic HAP.
 - (B) The Permittee may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the emission rate without add-on controls option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in Section 2.1 C.3.b above and must use no thinner and/or other additive, or cleaning material that contains organic HAP. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. The Permittee does not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the

compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

- (1) Determine the mass fraction of organic HAP for each material used. The Permittee shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the following options:
 - (a) Method 311 (appendix A to 40 CFR part 63). The Permittee may use Method 311 for determining the mass fraction of organic HAP by using the following procedures:
 - (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, the Permittee does not have to count it. Express the mass fraction of each organic HAP for which the Permittee counts, as a value truncated to four places after the decimal point (e.g., 0.3791)
 - (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).
 - (b) Method 24 (appendix A to 40 CFR part 60). For coatings, the Permittee may use Method 24 to determine the mass fraction of non-aqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. The Permittee may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.
 - (c) <u>Alternative method</u>. The Permittee may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The Permittee shall follow the procedure in 63.7(f) to submit an alternative test method for approval.
 - (d) Information from the supplier or manufacturer of the material. The Permittee may rely on information other than that generated by the test methods specified in Section 2.1 C.3.c.i.(B)(1)(a) through (c) above, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, the Permittee does not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to Section 2.1 C.3.c.i.(B)(1)(a) through (c) above, then the test method results will take precedence unless, after consultation, the Permittee demonstrates to the satisfaction of DAQ that the formulation data are correct.
 - (e) Solvent blends. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP, which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the Permittee may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this Subpart. If the Permittee uses the tables, he shall use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and may use Table 4 only if the solvent blends in the materials do not match any of the solvent blends in Table 3 and he knows only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, he demonstrates to the satisfaction of DAQ that the formulation data are correct.
- (2) <u>Determine the mass fraction of coating solids for each coating</u>. The Permittee shall determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in Section 2.1 A. 3.c.i.(B)(2)(a) through (c) below.
 - (a) Method 24 (appendix A to 40 CFR part 60). The Permittee may use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction

- reacts to form solids, you may use the alternative method contained in appendix A to this subpart, rather than Method 24, to determine the mass fraction of coating solids.
- (b) <u>Alternative method</u>. The Permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in Sec. 63.7(f) to submit an alternative test method for approval.
- (c) <u>Information from the supplier or manufacturer of the material</u>. The Permittee may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the DAQ that the formulation data are correct.
- (3) <u>Calculate the organic HAP content of each coating</u>. The Permittee may determine the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using the following equation:

$$H_c = \frac{W_c}{S_c} \qquad (Eq. 1)$$

Where: Hc = Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

Wc = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to Section 2.1 C.3.c.i.(B)(1) above.

Sc = Mass fraction of coating solids, kg coating solids per kg coating, determined according to Section 2.1 C.3.c.i.(B)(2) above.

- (4) Compliance demonstration. The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in Section 2.1 C.3.b above; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to Section 2.1 C.3.c.i.(B)(1) above. The Permittee shall keep all records required by Section 2.1 C.3.g below. As part of the notification of compliance status required in Section 2.1 C.3.f below, the Permittee shall identify the coating operation(s) for which he used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.1 C.3.b above, and he used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in Section 2.1 C.3.c.i.(B)(1) above.
- (C) (1) For each compliance period to demonstrate continuous compliance, the Permittee shall use no coating for which the organic HAP content (determined using Equation 1 of Section 2.1 C.3.c.i.(B)(3) above) exceeds the applicable emission limit in Section 2.1 C.3.b above, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to Section 2.1 C.3.c.i.(B)(1) above. A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in Section 2.1 C.3.c.i.(A) above, is the end of a compliance period consisting of that month and the preceding 11 months.
 - (2) If the Permittee chooses to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in Section 2.1 C.3.c.i.(C)(1) above is a deviation from the emission limitations that must be reported as specified in Section 2.1 C.3.f.vi below and/or Section 2.1 C.3.h.ix below.
 - (3) As part of each semiannual compliance report required by Section 2.1 C.3.h below, the Permittee shall identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in Section 2.1 C.3.b above, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.1 C.3.b above, and he used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to Section 2.1 C.3.c.i.(B)(1) above.
 - (4) The Permittee shall maintain records as specified in Section 2.1 C.3.g below.
- ii. <u>Emission rate without add-on controls option</u>. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in Section 2.1 C.3.b above, calculated as a

rolling 12-month emission rate and determined on a monthly basis. The Permittee shall meet all of the following requirements to demonstrate compliance with the emission limit using this option.

- (A) The Permittee shall complete the initial compliance demonstration for the initial compliance period ending on **April 30, 2008** or as amended by the rule, according to the requirements of Section 2.1 C.3.c.ii.(B) below. The Permittee shall determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The demonstration shall include the calculations according to Section 2.1 C.3.c.ii.(B) below and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in Section 2.1 C.3.b above.
- (B) The Permittee may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the compliant material option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in Section 2.1 C.3.b above. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which the Permittee uses the compliant material option. The Permittee does not need to re-determine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the emission rate without add-on controls option. If the Permittee uses coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.
 - (1) <u>Determine the mass fraction of organic HAP for each material</u>. Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in Section 2.1 C.3.c.i.(B)(1) above.
 - (2) <u>Determine the mass fraction of coating solids</u>. Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in Section 2.1 C.3.c.i.(B)(2) above.
 - (3) Determine the density of each material. Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of DAQ that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 below.
 - (4) <u>Determine the volume of each material used.</u> Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If the Permittee purchases materials or monitors consumption by weight instead of volume, he does not need to determine the volume of each material used. Instead, the Permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C and 2 below.
 - (5) <u>Calculate the mass of organic HAP emissions</u>. The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w$$
 (Eq. 1)

Where: He = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during

the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

Rw = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to Section 2.1 C.3.c.ii.(B)(5)(d) below. (The Permittee may assign a value of zero to Rw if he does not wish to use this allowance.)

(a) Calculate the kg of organic HAP in the coatings used during the month using Equation 1A below:

$$A = \sum_{i=1}^{m} \left(Vol_{e,i} \right) \! \left(D_{e,i} \right) \! \left(W_{e,i} \right) \qquad \text{(Eq. 1A)}$$

Where: A = Total mass of organic HAP in the coatings used during the month, kg

Volc,i = Total volume of coating, i, used during the month, liters.

Dc,i = Density of coating, i, kg coating per liter coating.

Wc,i = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used during the month.

(b) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} (Vol_{t,j})(D_{t,j})(W_{t,j})$$
 (Eq. 1B)

Where: B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

Volt, j = Total volume of thinner and/or other additive, j, used during the month, liters.

Dt,j = Density of thinner and/or other additive, j, kg per liter.

Wt,j = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used during the month.

(c) Calculate the kg of organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} (\operatorname{Vol}_{s,k}) (D_{s,k}) (W_{s,k})$$
 (Eq. 1C)

Where: C = Total mass of organic HAP in the cleaning materials used during the month, kg.

Vols, k = Total volume of cleaning material, k, used during the month, liters.

Ds,k = Density of cleaning material, k, kg per liter.

Ws,k = Mass fraction of organic HAP in cleaning material, k, kg organic

HAP per kg material.

p = Number of different cleaning materials used during the month.

- (d) If the Permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then he shall determine the mass according to the procedures in 40 CFR 63.4551 (e)(4).
- (6) <u>Calculate the total mass of coating solids used</u>. Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$M_{st} = \sum_{i=1}^{m} (Vol_{c,i}) (D_{c,i}) (M_{s,i}) \qquad (Eq. 2)$$

Where: Mst = Total mass of coating solids used during the month, kg.

Volc, i = Total volume of coating, i, used during the month, liters.

Dc,i = Density of coating, i, kgs per liter coating, determined according to Section 2.1 C.3.c.ii.(B)(3) above

Ms,i = Mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to Section 2.1 C.3.c.i.(B)(2) above

m = Number of coatings used during the month.

(7) <u>Calculate the organic HAP emission rate</u>. Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^{n} H_e}{\sum_{y=1}^{n} M_{st}}$$
 (Eq. 3)

Where: Hyr = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

He = Total mass of organic HAP emissions from all materials used during month y, kg, as calculated by Equation 1 of this section.

Mst = Total mass of coating solids used during month y, kg, as calculated by Equation 2 of this section.

y = Identifier for months.

- n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).
- (8) Compliance demonstration. The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the emission limit in Section 2.1 C.3.b above. The Permittee shall keep all records as required by Section 2.1 C.3.g below. As part of the notification of compliance status required by Section 2.1 C.3.f below, the Permittee shall identify the coating operation(s) for which he used the emission rate without addon controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in Section 2.1 C.3.b above, determined according to the procedures in this section.
- (C) (1) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to Section 2.1 C.3.c.ii.(B)(1) through (7) above, must be less than or

- equal to the applicable emission limit in Section 2.1 C.3.b above. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in Section 2.1 C.3.c.ii.(A) above is the end of a compliance period consisting of that month and the preceding 11 months. The Permittee shall perform the calculations in Section 2.1 C.3.c.ii.(B)(1) through (7) above on a monthly basis using data from the previous 12 months of operation.
- (2) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in Section 2.1 C.3.b above, this is a deviation from the emission limitation for that compliance period and must be reported as specified in Sections 2.1 C.3.f.vi and 2.1 C.3.h.x below.
- (3) As part of each semiannual compliance report required by Section 2.1 C.3.h below, the Permittee shall identify the coating operation(s) for which he used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the Permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in Section 2.1 C.3.b above, determined according to Section 2.1 C.3.c.ii.(B)(1) through (7) above.
- (4) The Permittee shall maintain records as specified in Section 2.1 C.3.g below.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if it does not conduct a monthly compliance demonstration as required above or if the compliance demonstration shows an exceedance of the emission limitations in Section 2.1 C.3.b above.

Operating Limits/Work Practice Standards [40 CFR 63.4492 and 40 CFR 63.4493]

d. For the above sources on which the Permittee uses the compliant material option in Section 2.1 C.3.c.i above or the emission rate without add-on controls option in Section 2.1 C.3.c.ii above, the Permittee is not required to meet any operating limits or work practice standards.

Notifications [40 CFR 63.4510]

- e. The Permittee shall submit the notifications in 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in Section 2.1 C.3.f below.
- f. The Permittee shall submit the notification of compliance status required by 63.9(h) by May 30, 2008. The notification of compliance status must contain the following information and the information in 63.9(h).
 - i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - iii. Date of the report and beginning and ending dates of the reporting period;
 - iv. Identification of the compliance option or options specified in Section 2.1 C.3.c above that you used on each coating operation during the initial compliance period;
 - v. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period;
 - vi. If the Permittee had a deviation, include the following information:
 - A. A description and statement of the cause of the deviation; and
 - B. If the Permittee failed to meet the applicable emission limit in Section 2.1 C.3.b above, include all the calculations used to determine the kg (lb) of organic HAP emitted per kg (lb) coating solids used. The Permittee does not need to submit information provided by the materials' suppliers or manufacturers, or test reports;
 - vii. For each of the following data items that are required by the compliance option(s) the Permittee used to demonstrate compliance with the emission limit, an example of how the Permittee determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to Sections 2.1 C.3.c.i.(B)(1), (2) or (3) above. The Permittee does not need to submit copies of any test reports.
 - (A) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material;
 - (B) Mass fraction of coating solids for one coating;
 - (C) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if the Permittee uses the compliant material option, only the example coating density is required; and
 - (D) The amount of waste materials and the mass of organic HAP contained in the waste materials for which the Permittee is claiming an allowance in Equation 1 of Section 2.1 C.3.c.ii.(B)(5) above;

- viii. The calculation of kg (lb) of organic HAP emitted per kg (lb) coating solids used for the compliance option(s) the Permittee used, as specified below:
 - (A) For the compliant material option, an example calculation of the organic HAP content for one coating, using Equation 1 of Section 2.1 C.3.c.i.(B)(3) above; and
 - (B) For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of Sections 2.1 C.3.c.ii.(B)(5) through (7) above.

Recordkeeping [40 CFR 63.4530]

- g. The Permittee shall collect and keep records of the data and information specified below. Failure to collect and keep these records is a deviation from the applicable standard.
 - i. A copy of each notification and report submitted to comply with this subpart, and the documentation supporting each notification and report;
 - ii. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If the Permittee conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, he shall keep a copy of the complete test report. If the Permittee uses information provided by the manufacturer or supplier of the material that was based on testing, he shall keep the summary sheet of results provided by the manufacturer or supplier. The Permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier;
 - iii. For each compliance period, the records specified below:
 - (A) A record of the coating operations on which the Permittee used each compliance option and the time periods (beginning and ending dates and times) for each option;
 - (B)For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of Section 2.1 C.3.c.i.(B)(3) above; and
 - (C)For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of Sections 2.1 C.3.c.ii.(B)(5) through (7) above; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.1 C.3.c.ii.(B)(5)(d) above; the calculation of the total mass of coating solids used each month using Equation 2 of Section 2.1 C.3.c.ii.(B)(6) above; and the calculation of each 12-month organic HAP emission rate using Equation 3 of Section 2.1 C.3.c.ii.(B)(7) above.
 - iv. A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the Permittee is using the compliant material option for all coatings at the source, he may maintain purchase records for each material used rather than a record of the mass used;
 - A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period;
 - vi. A record of the mass fraction of coating solids for each coating used during each compliance period;
 - vii. If the Permittee uses an allowance in Equation 1 of Section 2.1 C.3.c.ii.(B)(5) above for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF), he shall keep records in accordance with 40 CFR 63.4350(g).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the above records are not maintained.

Reporting [40 CFR 63.4520]

- h. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The first semiannual reporting period begins on February 1, 2008 and ends on June 30, 2008. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the following information:
 - i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. Identification of the compliance option or options specified in Section 2.1 C.3.c above that you used on each coating operation during the reporting period. If the Permittee switched between compliance options during the reporting

- period, he shall report the beginning and ending dates for each option used;
- v. If the Permittee used the emission rate without add-on controls compliance option (Section 2.1 C.3.c.ii above), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period
- viii. If there were no deviations from the emission limitations in Section 2.1 C.3.b above that apply, a statement that there were no deviations from the emission limitations during the reporting period
- ix. If the Permittee used the compliant material option and there was a deviation from the applicable organic HAP content requirements in Section 2.1 C.3.b above, the following information:
 - (A) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used:
 - (B) The calculation of the organic HAP content (using Equation 1 of Section 2.1 C.3.c.i.(B)(3) above) for each coating identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports);
 - (C) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports); and
 - (D) A statement of the cause of each deviation; and
- x. If the Permittee used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in Section 2.1 C.3.b above, the following information:
 - (A) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in Section 2.1 C.3.b above;
 - (B) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The Permittee shall submit the calculations for Equations 1, 1A through 1C, 2, and 3 of Sections 2.1 C.3.c.ii.(B)(5) through (7) above; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.1 C.3.c.ii.(B)(5) above. The Permittee does not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports); and
 - (C) A statement of the cause of each deviation.

D. Sanding/trimming/drilling/routing operations consisting of:

Fiberglass reinforced plastic sanding and trimming operations (ID No. ES6) with associated cartridge filter and cyclone (ID No. CD6) and

Drilling, routing, trimming, and sanding operations on one robotic cab production line (ID No. ES8) with associated cyclone and cartridge filter (ID No. CD8)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10P^{0.67}$	15A NCAC 02D .0515
	Where $E =$ allowable emission rate in pounds per	
	hour	
	P = process weight in tons per hour	
Visible Emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \text{ x } P^{0.67}$$
 Where $E =$ allowable emission rate in pounds per hour $P =$ process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the fiberglass reinforced plastic sanding and trimming operations (**ID No. ES6**) shall be controlled by one cyclone and one cartridge filter (**ID No. CD6**). Particulate matter emissions from the drilling, routing, trimming, and sanding operations (**ID No. ES8**) shall be controlled by one cyclone and one cartridge filter (**ID No. CD8**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly external visual inspection of the ductwork, cyclones, and cartridge filters for leaks; and
 - an annual (for each 12 month period following the initial inspection) internal inspection of the cartridge filters' structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, cyclones, or cartridge filters are not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of any maintenance performed on any control device; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on any control devices within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 D.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (**ID Nos. ES6 and ES8**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) is below the limit given in Section 2.1 D.2.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly bservations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 D.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. Two (2) natural gas-fired boilers (ID Nos. ESB2 and ESB3)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	(ID No. ESB2 only) 0.60 pounds per million Btu	15A NCAC 02D .0503
	(ID No. ESB3 only) 0.54 pounds per million Btu	
Sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Opacity	20% opacity	15A NCAC 02D .0521
Sulfur Dioxide	(ID No. ESB3 only) Natural Gas firing	15A NCAC 02D .0524 40 CFR Part 60 Subpart Dc
HAPs	Best Combustion Practices (ID No. ESB2 beginning May 20, 2019; ID No. ESB3 upon installation)	15A NCAC 02D .1111 [40 CFR 63 Subpart DDDDD]

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from this source (**ID No. ESB2**) into the atmosphere shall not exceed 0.60 pounds per million Btu heat input.
- b. Emissions of particulate matter from the combustion of natural gas that are discharged from this source (**ID No. ESB3**) into the atmosphere shall not exceed 0.54 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 E.1.a or b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

d. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the affected boilers (**ID Nos. ESB2 and ESB3**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for natural gas from the firing of natural gas in these sources.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the affected boiler (**ID No. ESB2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

 No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources.

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. For the boiler (ID No. ESB3), the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," including Subpart A "General Provisions."

Recordkeeping [15A NCAC 02Q .0508(f)]

b. In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired in the boiler (**ID No. ESB3**) during each month. The Permittee shall be deemed in noncompliance with 15A NCAC0 2D .0524 if these records are not maintained. [40 CFR 60.48c(g)(2)]

5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, .7490(d), .7499(l)]

- a. For the existing boiler (ID No. ESB2) (designed to burn gas 1 fuels with a heat input capacity of greater than 5 million Btu per hour and less than 10 million Btu per hour), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."
- b. For new boiler (**ID No. ESB3**) (i.e., reconstructed or new units designed to burn gas 1 fuels, with oxygen trim), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

<u>Definitions and Nomenclature</u> [40 CFR 63.7575]

c. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

d. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [40 CFR 63.7510(e), 63.56(b), 63.7495(a)]

- e. i. The Permittee shall complete the initial tune up and the one-time energy assessment for the existing boiler (**ID No. ESB2**) no later than May 20, 2019. This requirement has been met.
 - ii. The Permittee shall comply with the applicable requirements upon startup of for the new boiler (**ID No. ESB3**). This requirement has been met.

Notifications [40 CFR 63.7545(e), 63.7530(e), (f)]

- f. The Permittee shall submit a Notification of Compliance Status for the existing boiler (**ID No. ESB2**). The notification must be signed by a responsible official and submitted by July 19, 2019. This requirement has been met.
- g. As specified in 40 CFR 63.9(b)(4) and (5), the Permittee shall submit an Initial Notification to the DAQ not later than 15 days after the actual date of startup of the affected boiler (**ID No. ESB3**). This requirement has been met. [40 CFR 63.7545(c)]

Work Practice Standards [15A NCAC 02Q .0508(f)]

- h. The Permittee shall conduct a tune-up of the existing boiler (**ID No. ESB2**) every two years and the new boiler (**ID No. ESB3**) every five years as specified below:
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled or unscheduled shutdown..
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (The Permittee may delay the inspection until the next scheduled unit shutdown).
 - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject.
 - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
 - vi. For the new boiler (**ID No. ESB3**) with oxygen trim, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

[40CFR 63.7500(a), (e), 63.7540(a)(10), (a)(12)]

- i. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up (ID No. ESB2).
- j. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up. The initial tune-up shall be conducted no later than 61 months after the initial startup of the source (**ID No. ESB3**). [40 CFR 63.7515(d)]
- k. If these units are not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]
- 1. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]
 - The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 A.5.e through l are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

m. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: [§63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- n. The Permittee shall keep the following:
 - i. a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or 5-year compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
 - ii. maintain on-site and submit, if requested by the Administrator, a report containing the following information:
 - (A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

- iii. the associated records for Sections 2.1 E.5.e through I above.
- o. The Permittee shall:
 - i. maintain records in a form suitable and readily available for expeditious review;
 - ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective

- action, report, or record; and
- iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in Sections 2.1 A.5.n and o.

Reporting Requirements [15A NCAC 02Q .0508(f)]

- p. The Permittee shall submit compliance reports to the DAQ as follows:
 - i. Reports for existing boiler (**ID No. ESB2**) shall be submitted on a 2-year basis. The first report shall cover the period beginning on May 20, 2019 and ending on December 31, 2020. Subsequent 2-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. [40 CFR 63.7550(a), (b)]
 - ii. Reports for new boiler (**ID No. ESB3**) shall be submitted on a five year basis. The first report shall cover the period beginning on the compliance date specified in Section 2.1 E.5 g (i.e., start-up) and ending on the earliest December 31st less than five years from the compliance date. Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. [40 CFR 63.7550(a), (b), 63.10(a)(4), (5)]
- q. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]
- r. The compliance report must contain the following information:
 - i. Company name and address;
 - ii. Process unit information, emissions limitations, and operating parameter limitations;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. Include the date of the most recent tune-up for each unit required according to Section 2.1 E.5.f. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.
 - v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

 [40 CFR 63.7550(a) and (c), Table 9]
- s. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Sections 2.1 E.5.f through r are not met.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. Open molding and gel coat application operations consisting of:

Open molding utilizing non-atomizing guns (ID No. ES1A) and

One dry-filter type paint spray booth (gel coat spray booth) installed on gel coat application operations (ID No. ES4)

Fiberglass reinforced plastic molding operations consisting of:

Press 1 – one closed molding press (ID No. ES1B-01),

Press 11 – one 2,850-ton compression molding press (ID No. ES1C-01),

Press 9 – one 1,000-ton compression molding press (ID No. ES1C-02),

Press 12 – one 2,875-ton compression molding press (ID No. ES1C-08),

Press 13 – one 3,000-ton compression molding press (ID No. ES1C-09),

Press 14 – one 1,000-ton compression molding press (ID No. ES1C-10) and

Press 15 – one 2,000-ton compression molding press (ID No. ES1C-11)

Closed molding mixing process (ID No. ES1D)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	Organic HAP Emission Limits for Open Molding Operations (ID Nos. ES1A and ES4)	15A NCAC 02D .1111 40 CFR 63, Subpart WWWW
	Work Practices for Closed Molding, Cleaning, Storage, and BMC Manufacturing Operations	

1. 15A NCAC 02D .1111: Maximum Achievable Control Technology (MACT) – 40 CFR Part 63, Subpart WWWW; Reinforced Plastic Composites Production

Applicability [§63.5790]

- a. Operations listed in §63.6790(c) are specifically excluded from the emission limits and work practice standards provided in this section of the permit, including the following:
 - i. Application of mold sealing and release agents;
 - ii. Mold stripping and cleaning;
 - iii. Repair of parts not manufactured at the source, including non-routine manufacturing of parts;
 - iv. Personal activities that are not part of the manufacturing operations (such as hobby shops on military bases);
 - v. Prepreg materials as defined in §63.5935;
 - vi. Non-gel coat surface coatings;
 - vii. Application of putties, polyputties and adhesives;
 - viii. Repair or production materials that do not contain resin or gel coat;
 - ix. Research and development operations as defined in Section 112(c)(7) of the Clean Air Act;
 - x. Polymer casting; and,
 - xi. Closed molding operations (except for compression/injection molding).

Open Molding – Emission Limits [§63.5805(b), §63.5835(a), §63.5810, Table 3]

b. Emissions of organic HAP from the open molding operations (**ID Nos. ES1A and ES4**) shall not exceed the emission limits provide in the following table:

Operation Type	Application Method	Organic HAP Emission Limit
Open Molding – CR/HS*	Mechanical Resin Application	113 lbs/ton
	Filament Application	171 lbs/ton
	Manual Resin Application	123 lbs/ton
Open Molding – non- CR/HS*	Mechanical Resin Application	88 lbs/ton
	Filament Application	188 lbs/ton
	Manual Resin Application	87 lbs/ton
Open Molding – tooling	Mechanical Resin Application	254 lbs/ton
	Manual Resin Application	157 lbs/ton
Open Molding – low-flame	Mechanical Resin Application	497 lbs/ton
spread/low-smoke products	Filament Application	270 lbs/ton
-	Manual Resin Application	238 lbs/ton
Open Molding – shrinkage	Mechanical Resin Application	354 lbs/ton
controlled resins	Filament Application	215 lbs/ton
	Manual Resin Application	180 lbs/ton
Open Molding – gel coat	Tooling gel coating	440 lbs/ton
	White/off-white pigmented gel	267 lbs/ton
	coating	
	All other pigmented gel coating	377 lbs/ton
	CR/HS* or high performance gel coat	605 lbs/ton
	Fire retardant gel coat	854 lbs/ton
	Clear production gel coat	522 lbs/ton

^{* &}quot;CR/HS" means corrosion resistant and/or high strength.

- c. The Permittee shall demonstrate compliance with the organic HAP emissions limits above at the open molding operations (**ID Nos. ES1A and ES4**) in accordance with any of the following compliance options:
 - i. Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit, as provided in §63.5810(a).
 - (A) Calculate the actual organic HAP emissions factor for each different process stream within each operations type using the appropriate equations in Table 1 of the subpart or site-specific organic HAP emissions factors discussed in §63.5796. If the actual organic HAP emission factor is less than the emission limit provided in Section 2.2. A.1.b above, the Permittee has demonstrated compliance with the emission limit for that individual process stream.
 - (B) If any individual resin or gel coat is used in this compliance demonstration and is ALSO used in any of the averaging calculations described in (ii) through (iv) below, then all process streams using that individual resin or gel coat must also be included in the averaging calculations.
 - ii. Demonstrate that, on average, each combination of operation type and resin application method or gel coat type meets the individual organic HAP emissions limits, as provided in §63.5810(b).
 - (A) Group the process streams by the operation type and resin application method or gel coat type and then calculate a weighted average emission factor based on the amounts of each individual resin or gel coat used for the last 12 months. If the weighted average emission factor is less than the corresponding emission limit provided in Section 2.2. A.1.b above, the Permittee has demonstrated compliance with the emission limit for that combination of operation type and resin application method or gel coat type.
 - (B) The Permittee may, but is not required to, include process streams where compliance was demonstrated as provided in (i) above, subject to the limitations described in Section 2.2. A.1.c.i.(B) above.
 - (C) The Permittee should not include process streams for which compliance is demonstrated according to Section 2.2. A.1.c.iv. below.
 - iii. Demonstrate compliance with a weighted average emission limit, as provided in §63.5810(c).
 - (A) Calculate the weighted average organic HAP emissions limit for all open molding operations for the

- previous consecutive 12-month period. A separate weighted average organic HAP emissions limit shall be calculated for each calendar month.
- (B) Calculate the weighted average organic HAP emissions factor for all open molding operations for the previous consecutive 12-month period. If the weighted average emission factor is less than the weighted average organic HAP emissions limit, the Permittee has demonstrated compliance with the HAP emission limits.
- iv. For resins of the same type, demonstrate compliance with the emission limit for one application method, and use the same resin(s) for all application methods of that resin type, as provided in §63.5810(d).
 - (A) This compliance option is limited to resins of the same type and may be used for CR/HS, non-CR/HS, and tooling-type resins.
 - (B) For any combination of manual resin application, mechanical resin application, or filament application, the Permittee may elect to meet the emission limit for any one of these application methods and use the same resin(s) in all of the resin application methods. Table 7 of the subpart presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If the resin organic HAP content is less than the applicable value shown in Table 7, the Permittee has demonstrated compliance with the HAP emission limits.
 - (C) The Permittee may also use a weighted average organic HAP content for each application method as described the §63.5810(d)(2).
 - (D) The Permittee may simultaneously use the averaging calculations in Sections 2.2 A.1.c.ii or iii above to demonstrate compliance for any operations and/or resins not included in the compliance demonstrations provided in Section 2.2 A.1.c.iv. However, any resins included in the compliance demonstrations provided in (iv) may not be included in any of the averaging calculations described in Sections 2.2 A.1.c.ii or iii above.

The Permittee shall complete all necessary compliance demonstrations, as described above, within 30 days after the end of each calendar month. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the required compliance demonstration is not completed, a record of the required compliance demonstration is not retained, or if the Permittee cannot demonstrate compliance with the emission limit(s) using any of the compliance demonstration methods described above.

Work Practice Standards [§63.5805(b), §63.5835(a), Table 4]

- d. <u>Closed and Compression Molding</u>. At closed and compression molding presses (**ID Nos. ES1B-01, ES1C-01, ES1C-02, ES1C-08, ES1C-09, ES1C-10, and ES1C-11**), the Permittee shall uncover, unwrap, or expose only one charge per mold cycle per press.
 - i. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle;
 - ii. For machines with robotic loaders, no more than one charge may be exposed prior to the loader;
 - iii. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials.
 - iv. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if more molding compound is exposed per mold cycle than is permitted above.

- e. <u>Cleaning Operations</u>. The Permittee shall not use cleaning solvents that contain HAP at the affected sources, except that:
 - i. Styrene may be used as a cleaner in closed systems; and,
 - ii. Organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if it uses cleaning solvents that contain HAP at the affected sources, except as provided in Section 2.2 A.1.e.i and ii above.

f. Storage Operations.

The Permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing material storage tanks may be vented as necessary for safety. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if HAP-containing materials are not closed or covered as required above.

g. Mixing and Bulk Molding Compounding.

i. The mixer (ID No. ES1D) shall be equipped with covers with no visible gaps, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.

- ii. The Permittee shall close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety.
- iii. The Permittee shall keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.
- iv. Containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin).

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the mixer is not operated as required above.

Recordkeeping [§63.5895(c)-(d), §63.5915(c)-(d), §63.5920]

- h. The Permittee shall retain the following records:
 - i. For open molding operations for which the Permittee demonstrating compliance in accordance with Section 2.2. A.1.c.i of this permit:
 - (A) Organic HAP content of resins and gel coats; and,
 - (B) Operation where the resin is used.
 - ii. For open molding operations for which the Permittee demonstrating compliance in accordance with Section 2.2. A.1.c.ii, iii, or iv of this permit:
 - (A) Resin and gel coat usages;
 - (B) Organic HAP content of resins and gel coats; and,
 - (C) Operation where the resin is used.
 - iii. For open molding operations, retain all data, assumptions, and calculations used to determine organic HAP emission factors or average organic HAP contents.

Resin use records may be based on purchase records if the Permittee can reasonable estimate how the resin is applied. The organic HAP content records may be based on MSDS or on resin specifications supplied by the resin supplier. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the records listed above are not retained.

i. The Permittee shall retain a certified statement that the Permittee is in compliance with the work practice requirements provided in Sections 2.2. A.1.d through g of this permit. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1111 if the records listed above are not retained.

Reporting [§63.5895(d), §63.5910, Table 14]

- j. <u>Semiannual Compliance Reports</u>. The Permittee shall submit a semiannual compliance report by January 30th (covering the previous period between July 1st and December 31st) and July 30th (covering the previous period between January 1st and June 30th). The semiannual compliance report shall include the following information:
 - i. Company name and address;
 - ii. Statement by the Responsible Official with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - iii. Start and end dates of the compliance period covered in the report;
 - iv. For open molding operations for which the Permittee demonstrating compliance in accordance with Section 2.2. A.1. c.i of this permit, include a list of resins and gel coats and identify their application methods;
 - v. If the Permittee changed compliance options for the open molding operation, as provided in Section 2.2. A.1. c of this permit, during the reporting period included a statement as such.
 - vi. If there were no deviations from the organic HAP content limitations at the open molding operation or the work practice standards provided in Sections 2.2. A.1.b through g of this permit, include a statement as such; and,
 - vii. If there were deviations from the organic HAP content limitations at the open molding operation or work practice standards provided in Section 2.2. A.1.b through g include information listed in 40 CFR 63.5910(d).

B. Facility-wide:

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic	less than 250 tons per year	15A NCAC 02Q .0317
compounds	Avoidance of 15A NCAC 02D .0530	PSD Avoidance
Odors	State Enforceable Only	15A NCAC 02D .1806
	Odorous emissions must be controlled	

1. 15A NCAC 02Q .0317 AVOIDANCE CONDITIONS: for 15A NCAC 02D .0530 PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, facility-wide VOC emissions shall be less than 250 tons of VOCs per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]

- b. Each calendar month, the Permittee shall determine the total VOC emissions for the previous calendar month using the following calculations:
 - i. Styrene emissions from closed molding operations (E_I) (ID Nos. ES1B-01, ES1C-01, ES1C-02, ES1C-08, ES1C-09, ES1C-10, and ES1C-11) and mixing operations (ID No. ES1D) shall be calculated as follows:

$$E_1 = [(P_i)(EF_i) + (P_i)(EF_i) + (P_k)(EF_k) + \text{etc } ...]$$

where:

 E_I = emission rate of styrene (in lbs/month)

P = the usage of each styrene-containing material (i, j, k, etc) at the closed molding operations and mixing operation during the previous calendar month (in lbs material/month)

EF = the emission factor of each styrene containing material (i, j, k, etc.) in the compression molding and mixing operation as calculated using the styrene content and applicable method in sections ii through v below. The emission factors are expressed in lbs. of styrene emitted/lb. of styrene-containing material).

- ii. The emission factor for compression molding sheet molding compound (SMC) is expressed as a percentage of the available styrene monomer contained in the uncured SMC material that is processed in the compression molds. The emission factor for SMC part compression molding is:
 - 1.5% of the styrene monomer content (weight) in the SMC material
- iii. The emission factor for liquid composite molding (LCM) paste part compression molding shall be calculated using the two following separate equations.

For the spread of LCM paste:

EF = (0.0072) (% styrene) (+0.0008)

For poured LCM paste:

EF = (0.0022) (% styrene) (+0.0008)

NOTE: The "% styrene" input value in these equations must be in decimal form instead of percentage (e. g., 0.20 for 20%).

- iv. The emission factor for bulk molding composite (BMC) is expressed as a percentage of the available styrene monomer contained in the uncured BMC material that is processed in the compression molds. The emission factor for BMC part compression molding is:
 - 1.15% of the styrene monomer content (weight) in the BMC material
- v. The emission factor for covered mixing operation is 0.25% of styrene content in the mix.
- vi. VOC emissions from open molding and gel coat application operations (E_2) (**ID Nos. ES1A and ES4**) shall be

calculated in accordance with the attached (immediately following Section 2.2 B.1 of this permit) table. vii. Methyl ethyl ketone (MEK) emissions from the use of methyl ethyl ketone peroxide (MEKP) catalyst at the facility (E_3) shall be calculated as follows:

$$E_3 = MEKP * L_{MEK}$$

where:

 E_3 = emission rate of MEK (in lbs/month)

MEKP = the usage of MEKP catalyst during the previous calendar month (in lbs

material/month)

LMEK = the concentration of MEK in the MEKP per the supplier MSDS or technical data

sheet (lbs MEK/lb MEKP)

viii. Calculate cumulative VOC emissions from all other sources (including spray booths, ovens, non-styrene emissions from closed molding and mixing operations, combustion, etc.) (E_4).

ix. Total VOC emissions (EVOC) from all sources shall be calculated by summing E_1 , E_2 , E_3 and E_4 , as calculated above.

The required calculations, as provided above, shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required monthly emissions calculations are not completed and recorded as required in this condition or if facility wide VOC emissions exceed the limit in Section 2.2 B.1.a above.

c. Each calendar month, the Permittee shall calculate the VOC emissions for the previous consecutive 12-month period by summing the monthly emissions (*EVOC*), as calculated in Section 2.2 B.1 b. ix, for the previous 12 calendar months. The required calculation shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required calculation is not completed and recorded, or if the calculated VOC emissions exceed the limit provided in Section 2.2 B.1.a of this permit.

Reporting [15A NCAC 02Q .0508 (f)]

- a. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.2 B.1.b and c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. The monthly facility-wide VOC emissions for each of the previous 17 months; and
 - The 12-month rolling facility-wide VOC emissions for each of the 12-month periods over the previous 17 months.

EF Table 1: Unified Emission Factors for Open Molding of Composites

Revised and Approved: 10/13/2009

Emission Rate in Pounds of Styrene Emitted per Ton of Resin or Gelcoat Processed

Styrene content in resin/gelocat, % (1)	<33 ⁽²⁾	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	>50 (2)
Manual	0.126 x %styrene x 2000	83	89	94	100	106	112	117	123	129	134	140	146	152	167	163	169	174	180	((0.285 x %styrene) - 0.9529) x 2000
Manual w/ Vapor Suppressed Resin VSR (9)		8 59	Manu	al emi	ssion f	actor	isted a	above)	x (1	- (D.	00 x sp	ecific V	/SR re	uction	factor	for eac	n resir	suppr	essant	formulation())
Mechanical Atomized	0.169 x %styrene x 2000	111	128	140	154	168	183	197	211	225	240	254	268	283	297	311	325	340	354	((0.714 x %styrene) - 0.18) x 2000
Mechanical Atomized with VSR (5)		Mech	anical	Atomia	ed em	ission	factor	Disted	above	1 x	1 - (0	.45 x s	pecific	VSR re	ductio	n facto	for ea	ich res	in/supp	oressant formulationi)
Nechanical Atemized Controlled Spray (4)	0.130 x %styrene x 2000	86	97	108	110	130	141	152	163	174	185	198	207	218	229	240	251	262	273	0.77 x ((0.714 x %styrene) - 0.18) x 2000
Mechanical Controlled Spray with VSR	Mechanical Atomizad Controlled Spray emission factor [listed above] x (1 - (0.45 z specific VSR reduction factor for each resin/suppressant formstation)																			
Mechanical Non-Atomized	0.107 x %styrene x 2000	71	74	77	80	93	66	90	93	98	99	102	105	100	111	115	119	121	124	((0.157 x %styrene) - 0.0165) x 2000
Mechanical Non-Atomized with VSR (8)	Mechanical Non-Atomized emission factor (listed above) > (1 - (0.45 x specific VSR reduction factor for each resin/suppressent formulation))																			
Mechanical Non-Atomized application of resins that contain Methyl Styrene monomer (18)	i .			974		Mech	anical	Non-A	tomize	ed Styl	rene m	onom	er emi	ssion I	actor	(listed	abov	e) x .55	5	
Mechanical Non-Atomized Filled DCPD resins (11)	0.144 x % styrene x 2000	96	98	101	104	108	111	114	117	120	124	127	130	133	130	140	143	146	149	((0.1603 x % styrene)-0.0053) x 2000
Filament application	0.184 x %styrene x 2000	122	127	133	138	144	149	155	160	168	171	177	182	188	193	199	204	210	215	(0.2746 x %styrene) - 0.0298) x 2000
Filament application with VER (8)	0.120 x %styrene x 2000	70	83	86	00	03	07	100	104	108	111	115	118	122	125	120	133	138	140	0.65 x ((0.2745 x %styrene) - 0.8298) x 2000
Geleoat Application	0.445 x %styrone x 2000	294	315	236	358	377	396	419	430	460	491	501	622	543	564	594	805	828	846	(1.03646 z %styrene) - 0.195) x 2000
Geloost Controlled Spray Application (4)	0.325 x %styrene x 2000	216	230	245	260	275	290	205	321	338	351	368	391	366	411	427	442	457	472	0.73 x ((1.03646 x %styrene) - 0.195) x 2000
Gelcoat Non-Atomized Application **	SEE Note 9 below	198	205	214	223	232	241	250	259	268	278	287	293	305	314	323	332	341	350	(0.4505 x %styrene) - 0.0505) x 2000
Lesser Atomized Gelcoat Application (12)	for < 30 : 0.323 x % styrene x 2000	229	241	252	264	276	287	299	311	322	334	346	357	369	381	392	404	416	428	((0.5842 x % styrene)-0.07825) x 2000
Covered-Cure after Roll-Out	,				Non-V	SR pri	ocess	emissi	on fac	tor [lis	ted ab	ove] x	(0.0	0 for M	anual	corr	0.98 6	or Med	hanica	0
Covered-Cure without Roll-Out	Non-VSR process emission factor [listed above] x (0.00 for Manual <or> O.80 for Mechanical) Non-VSR process emission factor [listed above] x (0.50 for Manual <or> O.50 for Mechanical)</or></or>																			

Emission Rate in Pounds of Methyl Methacrylate Emitted per Ton of Gelcoat Processed

MMA content in gelocat, % (0)	1	2	3	4	5	8	7	8	9	10	11	12	13	11	15	16	17	18	19	≥20
Gel coat application (7)	15	30	45	80	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	0.75 x %MMA x 2000

- 1 including styrene monomer content as supplied, plus any extra styrene monomer added by the molder, but before addition of other additives such as powders, filers, glass,...etc.
 2 Formulas for materials with styrene content < 33% are based on the emission rate at 33% (constant emission factor expressed as percent of available styrene), and for styrene content > 50% on the emission rate based on the extraporare not based on test data but are believed to be conservative estimates. The value for "% styrene" in the formulas should be input as a fraction. For example, use the input value 0.30 for a resin with 30% styrene content by wit.
- The YSR reduction factor is determined by testing each resinsuppressant formulation according to the procedures detailed in the CFA Vapor Suppressant Effectiveness Test.

 SEE the CFA Controlled Spray Handbook for a detailed description of the controlled spray procedures.
- 5 The effect of vapor suppressants on emissions from filament winding operations is based on the Dow Filament Winding Emissions Study.
- Including MMA monomer content as supplied, plus any extra MMA monomer added by the molder, but before addition of other additives such as powders, fillers, glass,...etc. Based on gelocat data from NMMA Emission Study.
- 8 SEE the July 17, 2001 EECS report Emission Factors for Non-Atomized Application of Gel Coats used in the Open Molding of Composites for a detailed description of the non-atomized gelocal testing.

- So Use the equation (0.4309 x %styrene) 0.4000 x 2010 for gelooats with styrene contents between 19% and 32% by wt.; use the equation 0.185 x %styrene x 2000 for gelooats with 19% styrene content by wt.

 10 Refer to Section 3.0. Instructions and Examples for the Emission Factor table, 3.2 Calculation of the methyl styrene factor

 11 Use this factor for the non-atomized application of DCPD or DCPD-blend resin, when filled to 30% or more by weight

 12 Table from 30% TO 32% styrene content:

 30 31 32

 194 200 217

All instances of deviations from the requirements of this permit must be clearly identified.

STATE-ONLY REQUIREMENT:

15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

SECTION 3 - GENERAL CONDITIONS (version 5.5, 08/25/2020)

This section describes terms and conditions applicable to this Title V facility.

A. General Provisions [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

- Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
- 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
- 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
- 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
- 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
- 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. Severability Clause [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance North Carolina Division of Air Quality 1641 Mail Service Center Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. Circumvention - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. Permit Modifications

- 1. Administrative Permit Amendments [15A NCAC 020 .0514]
 - The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
- Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
 The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505
- 3. Minor Permit Modifications [15A NCAC 02Q .0515]
 - The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
- 4. Significant Permit Modifications [15A NCAC 02Q .0516]
 - The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
- 5. Reopening for Cause [15A NCAC 02Q .0517]
 - The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. Changes Not Requiring Permit Modifications

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02O .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)] "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

- 1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown:
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - notify the Regional Supervisor or Director immediately when corrective measures have been accomplished;
 and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

- 3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

- 1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
- 2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. <u>Duty to Provide Information (submittal of information)</u> [15A NCAC 02Q .0508(i)(9)]

- 1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- 2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. Compliance Certification [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

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comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

- 1. the identification of each term or condition of the permit that is the basis of the certification;
- 2. the compliance status (with the terms and conditions of the period covered by the certification);
- 3. whether compliance was continuous or intermittent; and
- 4. the method(s) used for determining the compliance status of the source during the certification period.

Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

- Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- 2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- 3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
- 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. <u>Termination, Modification, and Revocation of the Permit</u> [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- 1. the information contained in the application or presented in support thereof is determined to be incorrect;
- 2. the conditions under which the permit or permit renewal was granted have changed;
- 3. violations of conditions contained in the permit have occurred;
- 4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- 5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(1) and NCGS 143-215.3(a)(2)]

- 1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

- Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
- 2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. Annual Fee Payment [15A NCAC 02Q .0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
- 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
- 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. Annual Emission Inventory Requirements [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. Construction and Operation Permits [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. Standard Application Form and Required Information [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. Financial Responsibility and Compliance History [15A NCAC 02Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [15A NCAC 02Q .0501(d)]

- 1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
- 2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
- 3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. <u>Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)</u> – FEDERALLY-ENFORCEABLE ONLY Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

- 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
- 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
- 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
- 4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

- 1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more vears:
 - additional requirements (including excess emission requirements) become applicable to a source covered by Title IV:
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
- 3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
- 4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
- 5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

- 1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- 2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
- 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;

- c. any change in emissions; and
- d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS Alternative Operating Scenario
BACT Best Available Control Technology

BAE Baseline Actual Emissions

Btu British thermal unit CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEM Continuous Emission Monitor
CFR Code of Federal Regulations
CSAPR Cross-State Air Pollution Rule

DAO Division of Air Quality

DEQ Department of Environmental Quality
EMC Environmental Management Commission

EPA Environmental Protection Agency

FR Federal Register

GACT Generally Available Control Technology

GHGs Greenhouse Gases
HAP Hazardous Air Pollutant

LAER Lowest Achievable Emission Rate

MACT Maximum Achievable Control Technology

NAA Non-Attainment Area

NAAQS National Ambient Air Quality Standards
NCAC North Carolina Administrative Code
NCGS North Carolina General Statutes

NESHAP National Emission Standards for Hazardous Air Pollutants

NOx Nitrogen Oxides

NSPS New Source Performance Standard

NSR New Source Review

OAH Office of Administrative Hearings

PAE Projected Actual Emissions

PAL Plantwide Applicability Limitation

PM Particulate Matter

PM_{2.5} Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less PM₁₀ Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less

POS Primary Operating Scenario

PSD Prevention of Significant Deterioration

PTE Potential to Emit

RACT Reasonably Available Control Technology

SIC Standard Industrial Classification

SIP State Implementation Plan

SO₂ Sulfur Dioxide TAP Toxic Air Pollutant tpy Tons Per Year

VOC Volatile Organic Compound